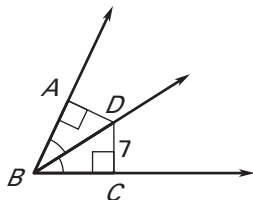
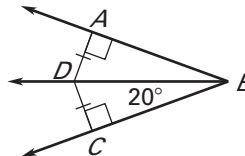


**LESSON**  
**5.3****Practice A***For use with pages 310–316***Use the information in the diagram to find the measure.**

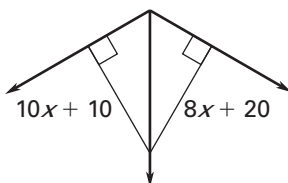
1. Find
- $AD$
- .



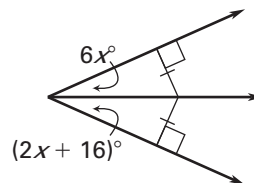
2. Find
- $m\angle DBA$
- .

**Find the value of  $x$ .**

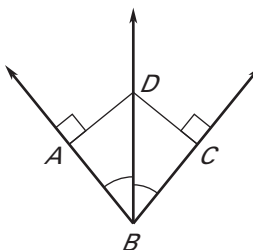
- 3.



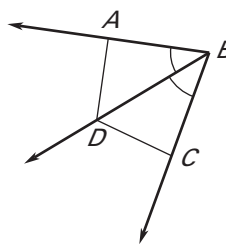
- 4.

**Is  $DA = DC$ ? Explain.**

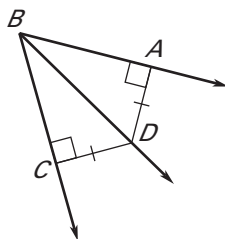
- 5.



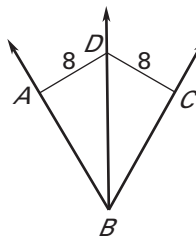
- 6.

**Can you conclude that  $\overrightarrow{BD}$  bisects  $\angle ABC$ ? Explain.**

- 7.

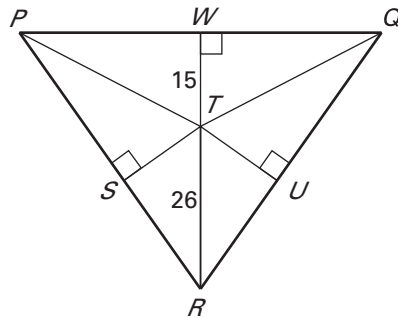


- 8.

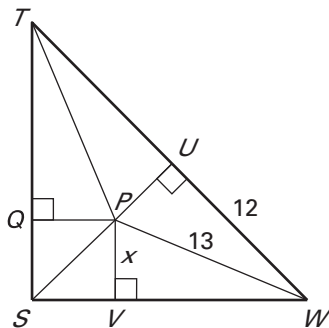


**LESSON**  
**5.3**
**Practice A** *continued*  
*For use with pages 310–316*

9. Point  $T$  is the incenter of  $\triangle PQR$ . Find  $ST$ .



10. Find the value of  $x$  that makes  $P$  the incenter of  $\triangle STW$ .



11. **Bird Bath** Your neighbor is moving a new bird bath to his triangular back yard. He wants the bird bath to be the same distance from each edge of the yard. Where should your neighbor place the bird bath? *Explain.*

12. **Landscaping** You are planting a tree at the incenter of your triangular front yard. Use the diagram to determine how far the tree is from the house.

